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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/606.210	06/29/2000	Govind Malalur	P108339-09053	8162

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EXAMINER

NGUYEN, BRIAN D

ART UNIT PAPER NUMBER

2661

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/606,210

Applicant(s)

MALALUR, GOVIND

Examiner

Brian D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-31 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 18-31 is/are allowed.  
6) ☒ Claim(s) 1 and 3-17 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 10 is objected to because of the following informalities:

Claim 10, line 6, it is suggested to insert --the-- before "remote memory".

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 17 recites the limitation "the remote memory" in line 5. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

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do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 5-14, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Kerstein et al (6,393,548).

Regarding claims 1 and 9, Kerstein discloses a network switch (12), comprising: a plurality of data ports (20) for communicating with a data network; a plurality of statistics counters connected to the data port for monitoring operational parameters associated with the data port, the statistics counter including statistics registers therein; a statistics gathering circuit connected to the statistics counter for reading the statistics registers, and for directly transmitting data from the statistics registers to a remote system memory (34) to thereby reconstruct the statistic registers in at least a portion of the remote system memory; direct memory access circuitry, wherein the statistics gathering circuit transmits the data from the statistics registers to the remote system memory via a Direct Memory Access (DMA) operation; and a remote CPU (40) for accessing the portion of the remote system memory to read the reconstructed statistic registers, wherein the remote CPU accesses the remote system memory to read selected ones of the statistic registers (see abstract; figures 1-3; col. 4, lines 19-58; col. 6, lines 6-15 & 57-67; col. 7, line 50-col. 8, line 19; col. 8, lines 33-37; col. 10, lines 1-24).

Regarding claims 5, 6, Kerstein discloses a CPU interface unit for interfacing the network switch to the remote CPU, the CPU interface unit comprising the statistics gathering circuit and

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the statistics counter therein (see figures 2A & 2B for details of the switch; Specifically, element 74 in figure 2B).

Regarding claims 7-8, Kerstein discloses the switch comprises a communication channel (bus) (see col.1, lines 26-31).

Regarding claim 10, Kerstein discloses the statistics gathering circuit is configured to transmit the data from the statistics registers to a predetermined section of the remote system memory, the network switch further comprising a CPU interface unit which directs a the remote CPU to identify where the data for the data port is stored in the predetermined section of remote memory (see figure 2B; col. 1, line 56-col. 2, line 4; col. 5, lines 51-63; col. 6, lines 57-67).

Regarding claims 11 and 12, Kerstein discloses a network switch (12), comprising: a data port for communicating with a data network; a statistics counter connected to the data port for monitoring operational parameters associated with the data port, the statistics counter including statistics registers therein, and a statistics gathering circuit connected to the statistics counter for reading the statistics registers, and for directly transmitting data from the statistics registers to a remote system memory; and further comprising an active counter register which is configured to selectively enable statistics gathering from selected ones of the statistics registers (see abstract; figures 1-3; col. 4, lines 19-58; col. 6, lines 6-15 & 57-67; col. 7, line 50-col. 8, line 19; col. 8, lines 33-37; col. 10, lines 1-24. Note that the function of the active counter register is just to select the statistics registers for statistics gathering that is performed by Kerstein's buffer manager and/or read buffer).

Regarding claims 13-14, and 17, claims 13-14 and 17 are method claims that have substantially the same limitations as the apparatus claim 1. Therefore, they are subject to the same rejection.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3-4 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kerstein et al (6,393,548) in view of Alexander et al (5,909,564).

Regarding claims 3-4 and 15-16, Kerstein further discloses periodically update all the per port statistics (see col. 10, lines 1-2), Kerstein does not specifically disclose the use of a timer unit and a timer value indicating a number of system clock cycles which determines the predetermined period. However, it is obvious that a predetermined period is based on a number of clock cycles and a timer is used to measure time. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the timer for measuring time so that the statistics registers can be repeatedly read and transmit to the remote memory in order to prevent overflow in the internal memory.

***Allowable Subject Matter***

8. The indicated allowability of claims 11, 12, and 17 are withdrawn.

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9. Claims 18-31 are allowed.

***Response to Arguments***

Applicant's arguments filed 10/25/04 have been fully considered but they are not persuasive. The applicant argued that *Kerstein does not teach or suggest a remote CPU that accesses the portion of the remote system memory to read the reconstructed statistic registers, wherein the remote CPU accesses the remote system memory to read selected ones of the statistic registers as recited in claims 1 and 13*. The examiner disagrees because Kerstein does disclose a remote CPU (40) that accesses the portion of the remote system memory (34) to read the reconstructed statistic registers, wherein the remote CPU accesses the remote system memory to read selected ones of the statistic registers as recited in claims 1 and 13 (see, for example, different portions of external memory 34 in figure 3; col. 6, lines 57-67; col. 8, lines 33-37. Note that the buffer manager and the read/write buffer are used for reading/writing data from/to certain location in the memory). Kerstein also discloses the use of direct memory access (DMA) as described in col. 6, line 64-65.

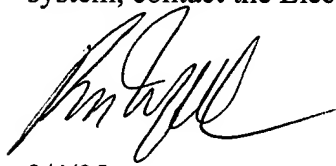
***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



3/4/05

**BRIAN NGUYEN**  
**PRIMARY EXAMINER**